

LAND RECLAMATION COMMISSION

STATE OF MISSOURI

P.O. BOX 176

JEFFERSON CITY, MISSOURI 65102

573-751-4041

Permit To Engage in Surface Mining

LAND RECLAMATION COMMISSION

ISSUES TO

GLEN-GERY CORPORATION

Pursuant to "The Land Reclamation Act," RSMo, 2001, and on conformity with the statements

In the application, a permit is hereby granted to engage in surface mining of
clay & shale in the state of Missouri. The extent of the

Proposed mining operation(s) will be on 40 acres, more or less.

The locations of the operation(s) under this permit is/are as follows: **Renewal**

| County | Section | Township | Range | Acres Renewed | Acres New | Total Acres | Site/Stream Name | Site Number |
|------------|---------|----------|-------|------------------|--------------|----------------|---------------------|----------------|
| Monroe | 20 | 55N | 09W | 5 | 0 | 5 | Paris Clay Site | 0543 |
| Livingston | 18 | 57N | 24W | 35 | 0 | 35 | Midland Shale Site | 0544 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

This permit may be suspended or revoked upon violation of any or all of the conditions set forth in "The Land Reclamation Act," RSMo. 2001, or in such rules and regulations as are promulgated pursuant thereto by the Land Reclamation Commission.

IN WITNESS WHEREOF I have hereunto set my hand this 4th day of March 2004


DIRECTOR OF STAFF
Land Reclamation Commission

Permit No. 0545
Effective Date 03/09/2004
Expiration Date 03/08/2005

MO 780-1122 (6-95)

| | | | |
|---|--------------------------------|---|--------------------------|
| NAME OF CORPORATION, COMPANY, PARTNERSHIP OR INDIVIDUAL GLEN - GERY CORPORATION | | DATE | |
| ADDRESS P.O. Box 340 | CITY SHOEMAKERSVILLE | STATE PA | ZIP CODE 19555 |
| CONTACT PERSON SHAWN J. FRYE, QUARRY / RAW MATERIALS MANAGER | | TELEPHONE NUMBER 610-562-3076 | |

FEES: COMPLETE SECTION I OR SECTION II

SECTION I. Fees: Open pit operators and those mining more than 5,000 tons of sand and/or gravel:

1. To compute the site fee complete the information below:

| SITE NAME OR NUMBER (add a separate sheet for additional sites) | Mark each month that the site will be operated during the permit year | For sites operated less than six months per permit year pay \$150 For sites operated six months or more per permit year pay \$300 |
|--|---|--|
| 1. MIDLAND SHALE RT LIVINGSTON COUNTY | Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec | \$ 150.00 |
| 2. PARIS PIT MONROE COUNTY | Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec | \$ 150.00 |
| 3. | Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec | \$ |
| 4. | Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec | \$ |
| 5. | Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec | \$ |
| 6. | Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec | \$ |
| 7. | Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec | \$ |
| 8. | Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec | \$ |
| 9. | Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec | \$ |
| 10. | Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec | \$ |

TOTAL SITE FEE \$ 300.00

2. Acreage Fee \$5 X 40 number of acres bonded\$ 200.00

3. Annual Permit Fee.....\$ 500

4. Total Fee (Add totals from 1, 2 and 3).....\$ 1000.00

NOTE: If Total Fee exceeds \$2,500.00 then pay only \$ 2,500

SECTION II. FEES: Sand or gravel operators mining less than 5,000 tons per year:

1. Annual Permit Fee **\$ 300**

| | | |
|---|---------------------------------------|----------------|
| SIGNATURE OF APPLICANT  | TITLE QUARRY/RAW MATERIALS MANAGER | DATE 2/3/04 |
|---|---------------------------------------|----------------|

Appeared before me this 3rd day of February, 20 04
to me personally known, who executed the above as their free acts and deeds.

| | | |
|--|--|--|
| NOTARY PUBLIC EMEOSSEER SEAL | STATE OF <i>Pennsylvania</i> | COUNTY (OR CITY OF ST. LOUIS) |
| | SUBSCRIBED AND SWORN BEFORE ME, THIS <i>3rd</i> DAY OF <i>Feb.</i> YEAR <i>2004</i> | USE RUBBER STAMP IN CLEAR AREA BELOW. |
| NOTARY PUBLIC SIGNATURE <i>Jean E. Young</i> | MY COMMISSION EXPIRES <i>10/27/2007</i> | COMMONWEALTH OF PENNSYLVANIA Notarial Seal Jean E. Young, Notary Public Shoemakersville Boro, Berks County Pa. Expires Oct. 27, 2007 |
| NOTARY PUBLIC NAME (TYPED OR PRINTED) JEAN E. YOUNG | | |

FOR DEPARTMENT USE ONLY: APPROVED BY

DATE APPROVED

PERMIT NUMBER

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Jean E. Young, Notary Public
Shoemakersville Boro, Berks County
My Commission Expires Oct. 27, 2007
EXPIRATION DATE
Member, Pennsylvania Association Of Notaries



MISSOURI DEPARTMENT OF NATURAL RESOURCES
LAND RECLAMATION COMMISSION
SITE INFORMATION FORM

RECEIVED
MAR 2 2000
MISSOURI LAND RECLAMATION COMMISSION

To be completed for each separate area of disturbance associated with mining operations.

| | | | |
|---|---------------------|--|--|
| SITE NAME OR NUMBER MIDLAND SHALE PIT | | PERMIT NUMBER 545 | |
| COMPANY NAME GLEN GERY CORPORATION | | | |
| COUNTY LIVINGSTON | 1/4 SECTION | SECTION 18 | |
| TOWNSHIP 57N | RANGE 24W | ACRES 35 | |
| RIVER OR STREAM NAME (FOR IN-STREAM ACRES) | | | |
| MINERAL COMMODITY SHALE | | ESTIMATED TONS/YEAR (FOR GRAVEL SITES) | |

| | | |
|---|--------------------|--|
| NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE) GLEN GERY CORPORATION | | |
| ADDRESS P.O. BOX 36 | | |
| CITY UTICA | STATE MO | ZIP CODE 64686 |
| SOURCE OF RIGHT TO MINE (CHECK ONE): <input type="checkbox"/> MINERAL DEED <input type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER (DESCRIBE): _____ | | DATE OF AGREEMENT <input type="checkbox"/> LEASE <input type="checkbox"/> VERBAL AGREEMENT |

| | | |
|---|-------|--|
| MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE) | | |
| ADDRESS | | |
| CITY | STATE | ZIP CODE |
| SOURCE OF RIGHT TO MINE (CHECK ONE): <input type="checkbox"/> MINERAL DEED <input type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER (DESCRIBE): _____ | | DATE OF AGREEMENT <input type="checkbox"/> LEASE <input type="checkbox"/> VERBAL AGREEMENT |

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.



MISSOURI DEPARTMENT OF NATURAL RESOURCES
LAND RECLAMATION COMMISSION
MINE PLAN

RECEIVED
MAR 2000
MISSOURI LAND RECLAMATION COMMISSION
P.O. BOX 176
JEFFERSON CITY, MO 65102

TYPE OF PLAN (CHECK ONE):

☐ SHORT TERM, FOR ONE PERMIT YEAR

☒ LONG TERM, FOR PERIOD THROUGH DATE:

COMPANY NAME GLEN GERY CORP. MIDLAND SHALE PIT

01-01-2000 to 12-31-2050

DESCRIPTION OF SITE PRIOR TO LAND RECLAMATION COMMISSION PERMITTING (BY APPLICANT OR PRIOR OPERATOR), INCLUDING SOIL, VEGETATION AND TOPOGRAPHY

Steep hillside -wooded-very thin soil with limited vegetation.

OPERATION PLAN - 10 CSR 40-10.020(2)(D)1.

A. TOPSOIL

AVERAGE DEPTH OF TOPSOIL, PRIOR TO LAND RECLAMATION COMMISSION PERMITTING

1-2 INCHES

IS TOPSOIL TO BE SOLD OR DISCARDED OFFSITE?

☐ YES OR ☒ NO

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL REMOVAL

Earth moving dozer strips topsoils and underlying material for a total of 12" and leaves either side of pit area.

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL STORAGE AND PROTECTION

Removed soils will be stockpiled either side of pit area and seeded with wheat and orchard grass to limit wind and water erosion.

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MAR 2 2000

MISSOURI LAND
RECLAMATION COMMISSION

B. SPOIL

DESCRIBE METHODS AND LOCATION OF SPOIL PLACEMENT AND DISPOSAL

Overburden removed in order to reach useable shale material. Will be stockpiled to be used back in grading of slopes to reshape vertical high walls at end of pit use.

C. ACID MATERIALS

DESCRIBE METHODS AND EQUIPMENT USED FOR HANDLING ACID MATERIALS (IF NONE IS ANTICIPATED, WRITE "NONE" BELOW)

None.

D. PIT INFORMATION (GIVE ALL DIMENSIONS IN FEET)

DESCRIBE LOCATION AND ORIENTATION OF PIT, IF NOT CLEAR ON SITE MAPS

Pit will continue westward-direction as per enclosed map.

YES NO

☐

☒

Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

☐

☒

Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right of way, and in no case may the excavation be closer to the right of way than fifty feet or twenty-five feet plus one and one-half (1-½) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☒

☐

Will any excavation start at or within fifty feet (50') of any property line? (NOTE: If the answer is "yes", a safety barrier may be needed.)

MAR 27 2000

MISSOURI LAND

RECLAMATION COMMISSION

| PURPOSE OR LAND USE |
|--|
| <p>1. <u>RECREATION</u></p> <p>2. <u>INDUSTRIAL</u></p> <p>3. <u>AGRICULTURE</u></p> <p>4. <u>RESIDENTIAL</u></p> <p>5. <u>COMMERCIAL</u></p> <p>6. <u>GOVERNMENT</u></p> <p>7. <u>OTHER</u></p> |

| | | | | | |
|-----------------------------|------|------|----------|---------|--------------|
| B. SEEDING OR PLANTING TIME | DATE | TIME | LOCATION | WEATHER | OBSERVATIONS |
|-----------------------------|------|------|----------|---------|--------------|

DESCRIBE METHODS AND EQUIPMENT TO BE USED FOR SEEDING OR PLANTING

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients. Mulch will be applied to all slopes exceeding 5:1.

DESCRIBE METHODS AND EQUIPMENT TO BE USED FOR SEEDING OR PLANTING

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients. Mulch will be applied to all slopes exceeding 5:1.

ATTACH ADDITIONAL SHEETS FOR ADDITIONAL SEED MIXES.

B. GRADING

DESCRIBE PROPOSED RECLAIMED TOPOGRAPHY, INCLUDING SLOPES

Slope 3 to 1 to center of pit area.

RECEIVED
MAR 22 2000MISSOURI LAND
RECLAMATION COMMISSION**C. DESCRIBE THE GENERAL SEQUENCE AND TIMING OF THE FOLLOWING ACTIVITIES**

GRADING

Within 12 months of closing of open pit mining, of all mined areas.
changed by G. Sharp as per phone conversation with Donna Preszler
4-1-00
G. Sharp

REPLACEMENT OF TOPSOIL

Immediately following and along with grading, within 1 yr on all mined
portions. changed by G. Sharp as per phone conversation with Donna Preszler
4-1-90
G. Sharp

REVEGETATION

This will be accomplished within 24 months after expiration of the permit.

AVERAGE DEPTH OF REPLACED TOPSOIL (INCHES)

12-14 "

D. USE OF LAND WHEN RECLAIMED

Estimate acreage of each land use below, after reclamation

ESTIMATED ACRES:

Wildlife (forest or other habitat with livestock excluded)

Agricultural (pasture, cropland, and horticultural)

35

Development (residential, industrial, and recreational)

Water impoundments (for wildlife, agricultural, or development)

By my signature, I attest to the following:

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Sections 444.760 through 444.789, RSMo and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained the approval of all landowner's for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

RECEIVED
MAR 28 2000
MISSOURI LAND
RECLAMATION COMMISSION

| | | | |
|---|---|--|--|
| SIGNATURE OF APPLICANT <i>R. J. Saale</i> | | TITLE PLANT MANAGER | DATE 03-13-00 |
| NOTARY PUBLIC EMBOSSEER SEAL | STATE <i>Missouri</i> | COUNTY (OR CITY OF ST. LOUIS) <i>Livingston</i> | |
| | SUBSCRIBED AND SWORN BEFORE ME, THIS <i>13</i> DAY OF <i>March</i> <i>2000</i> | | USE RUBBER STAMP IN CLEAR AREA BELOW RICHARD J. SAALE Notary Public - State of Missouri Commissioned in Livingston County Commission Expires March 28, 2000 |
| | NOTARY PUBLIC SIGNATURE <i>Richard J. Saale</i> | MY COMMISSION EXPIRES <i>3/23/2000</i> | |
| | NOTARY PUBLIC NAME (TYPED OR PRINTED) <i>Richard J. SAALE</i> | | |
| APPROVED BY (DIRECTOR'S REPRESENTATIVE) <i>[Signature]</i> | | DATE APPROVED <i>5-1-00</i> | PERMIT NUMBER <i>0546</i> |



MISSOURI DEPARTMENT OF NATURAL RESOURCES
LAND RECLAMATION COMMISSION
SITE INFORMATION FORM

Livingston

To be completed for each separate area of disturbance associated with mining operations.

| | | |
|---|---------------------|--|
| SITE NAME OR NUMBER Midland Shale Pit | | PERMIT NUMBER 545 |
| COMPANY NAME Glen-Gery Corporation | | |
| COUNTY Livingston | 1/4 SECTION | SECTION 18 |
| TOWNSHIP 57N | RANGE 24W | ACRES 17.20 <i>2-15-00</i> |
| RIVER OR STREAM NAME (FOR IN-STREAM ACRES) | | |
| MINERAL COMMODITY Shale | | ESTIMATED TONS/YEAR (FOR GRAVEL SITES) |

| | | |
|--|--------------------|--|
| NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE) Glen-Gery Corporation | | |
| ADDRESS P. O. Box 410 | | |
| CITY Chillicothe, | STATE MO | ZIP CODE 64601 |
| SOURCE OF RIGHT TO MINE (CHECK ONE): <input type="checkbox"/> MINERAL DEED <input checked="" type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER (DESCRIBE): _____ | | DATE OF AGREEMENT <input type="checkbox"/> LEASE <input type="checkbox"/> VERBAL AGREEMENT |

| | | |
|---|-------|--|
| MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE) | | |
| ADDRESS | | |
| CITY | STATE | ZIP CODE |
| SOURCE OF RIGHT TO MINE (CHECK ONE): <input type="checkbox"/> MINERAL DEED <input type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER (DESCRIBE): _____ | | DATE OF AGREEMENT <input type="checkbox"/> LEASE <input type="checkbox"/> VERBAL AGREEMENT |

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.



MISSOURI DEPARTMENT OF NATURAL RESOURCES
LAND RECLAMATION COMMISSION
MINE PLAN

P.O. BOX 176
JEFFERSON CITY, MO 65102

TYPE OF PLAN (CHECK ONE):

☐ SHORT TERM, FOR ONE PERMIT YEAR

☒ LONG TERM, FOR PERIOD THROUGH DATE: 1 year MIDLAND SHALE PIT 12-31-07

DESCRIPTION OF SITE PRIOR TO LAND RECLAMATION COMMISSION PERMITTING (BY APPLICANT OR PRIOR OPERATOR), INCLUDING SOIL, VEGETATION AND TOPOGRAPHY.

Steep hillside - wooded - very thin soil with limited vegetation

OPERATION PLAN - 10 CSR 40-10.020(2)(D)1.

A. TOPSOIL

AVERAGE DEPTH OF TOPSOIL, PRIOR TO LAND RECLAMATION COMMISSION PERMITTING

1-2 INCHES

IS TOPSOIL TO BE SOLD OR DISCARDED OFFSITE?

☐ YES OR ☒ NO

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL REMOVAL

Earth moving dozer strips topsoils and underlying material for a total of 12" and leaves either side of pit area.

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL STORAGE AND PROTECTION

Removed soils will be stockpiled either side of pit area and seeded with wheat and orchard grass to limit wind and water erosion.

B. SPOIL

DESCRIBE METHODS AND LOCATION OF SPOIL PLACEMENT AND DISPOSAL

Overburden removed in order to reach useable shale material-will be stockpiled to be used back in grading of slopes to reshape vertical high walls at end of pit use.

C. ACID MATERIALS

DESCRIBE METHODS AND EQUIPMENT USED FOR HANDLING ACID MATERIALS (IF NONE IS ANTICIPATED, WRITE "NONE" BELOW)

NONE

D. PIT INFORMATION (GIVE ALL DIMENSIONS IN FEET)

DESCRIBE LOCATION AND ORIENTATION OF PIT, IF NOT CLEAR ON SITE MAPS

Pit will continue westward - direction as per enclosed map.

YES NO

☐ ☒ Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

☐ ☒ Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right of way, and in no case may the excavation be closer to the right of way than fifty feet or twenty-five feet plus one and one-half (1-½) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☐ ☒ Will any excavation start at or within fifty feet (50') of any property line?
(NOTE: If the answer is "yes", a safety barrier may be needed.)

RECLAMATION PLAN - 10 CSR 40-10.020(2)(D)2.

A. REVEGETATION (Attach additional sheets, if needed)

| | | |
|---------------------|---|--|
| REVEGETATION MIX #1 | PURPOSE OR LAND USE Limited Pasturing | B. SEEDING OR PLANTING TIME Spring/March-April |
|---------------------|---|--|

DESCRIBE METHODS AND EQUIPMENT TO BE USED FOR SEEDING OR PLANTING

After soil replacement and grading of 3 to 1 slopes, 30' horizontal to 10' of rise, seeding will be by broadcasting followed by harrowing.

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients. Mulch will be applied to all slopes exceeding 5:1.

| SEEDED SPECIES | POUNDS/ACRE | TREE OR SHRUB SPECIES | STEMS/ACRE |
|----------------|-------------|-----------------------|------------|
| Wheat | 50# | | |
| Orchard Grass | 6# | | |
| Fescue | 10# | | ----- |
| Red Clover | 10# | | |

| | | |
|---------------------|---------------------|-----------------------------|
| REVEGETATION MIX #2 | PURPOSE OR LAND USE | B. SEEDING OR PLANTING TIME |
|---------------------|---------------------|-----------------------------|

DESCRIBE METHODS AND EQUIPMENT TO BE USED FOR SEEDING OR PLANTING

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients. Mulch will be applied to all slopes exceeding 5:1.

| SEEDED SPECIES | POUNDS/ACRE | TREE OR SHRUB SPECIES | STEMS/ACRE |
|----------------|-------------|-----------------------|------------|
| | | | |
| | | | |
| | | | |
| | | | |

ATTACH ADDITIONAL SHEETS FOR ADDITIONAL SEED MIXES.

Livingston

B. GRADING

DESCRIBE PROPOSED RECLAIMED TOPOGRAPHY, INCLUDING SLOPES

Slope 3:1 to center of pit area

C. DESCRIBE THE GENERAL SEQUENCE AND TIMING OF THE FOLLOWING ACTIVITIES

GRADING

Within 12 months of closing of open pit mining

REPLACEMENT OF TOPSOIL

Immediately following and along with grading

REVEGETATION

This will be accomplished within 24 months after expiration of the permit.

AVERAGE DEPTH OF REPLACED SOIL (INCHES)

12-14"

D. USE OF LAND WHEN RECLAIMED

Estimate acreage of each land use below, after reclamation

ESTIMATED ACRES:

Wildlife (forest or other habitat with livestock excluded)

5

Agricultural (pasture, cropland, and horticultural)

12

Development (residential, industrial, and recreational)

Water impoundments (for wildlife, agricultural, or development)

3

per D.T.
12-16-94

By my signature, I attest to the following:

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Sections 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained the approval of all landowner's for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

| | | | |
|---|--|---|--|
| SIGNATURE OF APPLICANT <i>Paul E McIntosh</i> | | TITLE Plant Manager | DATE 2-24-92 |
| NOTARY PUBLIC EMBOSSEER SEAL | STATE Missouri | COUNTY (OR CITY OF ST. LOUIS) Livingston | |
| | SUBSCRIBED AND SWORN BEFORE ME, THIS 3 DAY OF March 19 92 | | USE RUBBER STAMP IN CLEAR AREA BELOW RICHARD J. SAALE Notary Public - State of Missouri Commissioned in Livingston County My Commission Expires March 23, 1992 |
| | NOTARY PUBLIC SIGNATURE <i>Richard J. Saale</i> | MY COMMISSION EXPIRES 3/23/92 | |
| | NOTARY PUBLIC NAME (TYPED OR PRINTED) RICHARD J SAALE | | |
| APPROVED BY (DIRECTOR'S REPRESENTATIVE) <i>Karen F. Torth</i> LRSI | | DATE APPROVED 4/6/92 | PERMIT NUMBER 545 |



MISSOURI DEPARTMENT OF NATURAL RESOURCES
LAND RECLAMATION COMMISSION
SITE INFORMATION FORM

Monroe

To be completed for each separate area of disturbance associated with mining operations.

SITE NAME OR NUMBER

Paris Clay Pit

PERMIT NUMBER

545

COMPANY NAME

Glen-Gery Corporation

COUNTY

Monroe

1/4 SECTION

SW

SECTION

20

TOWNSHIP

55N

RANGE

9W

ACRES

11

RIVER OR STREAM NAME (FOR IN-STREAM ACRES)

MINERAL COMMODITY

Clay

ESTIMATED TONS/YEAR (FOR GRAVEL SITES)

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE)

Robert Kendrick

ADDRESS

#7 Griffith Drive

CITY

Monroe City

STATE

MO

ZIP CODE

63456

SOURCE OF RIGHT TO MINE (CHECK ONE):

☐ MINERAL DEED

☐ LEASE

☐ WARRANTY DEED

☒ VERBAL AGREEMENT

☐ OTHER (DESCRIBE):

DATE OF AGREEMENT

07-08-90

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE)

ADDRESS

CITY

STATE

ZIP CODE

SOURCE OF RIGHT TO MINE (CHECK ONE):

☐ MINERAL DEED

☐ LEASE

☐ WARRANTY DEED

☐ VERBAL AGREEMENT

☐ OTHER (DESCRIBE):

DATE OF AGREEMENT

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.



MISSOURI DEPARTMENT OF NATURAL RESOURCES
LAND RECLAMATION COMMISSION
MINE PLAN

P.O. BOX 176
JEFFERSON CITY, MO 65102

TYPE OF PLAN (CHECK ONE):

- ☐ SHORT TERM, FOR ONE PERMIT YEAR
- ☒ LONG TERM, FOR PERIOD THROUGH DATE: 1996 PARIS CLAY PIT *2000 1 year... changed to 96*

DESCRIPTION OF SITE PRIOR TO LAND RECLAMATION COMMISSION PERMITTING (BY APPLICANT OR PRIOR OPERATOR), INCLUDING SOIL, VEGETATION AND TOPOGRAPHY.

Slightly rolling 3:1 slope in grasses

OPERATION PLAN - 10 CSR 40-10.020(2)(D)1.

A. TOPSOIL

AVERAGE DEPTH OF TOPSOIL, PRIOR TO LAND RECLAMATION COMMISSION PERMITTING

12-14" INCHES

IS TOPSOIL TO BE SOLD OR DISCARDED OFFSITE?

☐ YES OR ☒ NO

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL REMOVAL

Use crawler loader and/or trucks to move topsoil to stockpile
in far north section of pit

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL STORAGE AND PROTECTION

Topsoil stored in stockpile. Stockpile seeded down with
wheat to limit wind and water erosion

B. SPOIL

DESCRIBE METHODS AND LOCATION OF SPOIL PLACEMENT AND DISPOSAL

Continuous backfill in bottom of pit area following mining of useable material

C. ACID MATERIALS

DESCRIBE METHODS AND EQUIPMENT USED FOR HANDLING ACID MATERIALS (IF NONE IS ANTICIPATED, WRITE "NONE" BELOW)

NONE

D. PIT INFORMATION (GIVE ALL DIMENSIONS IN FEET)

DESCRIBE LOCATION AND ORIENTATION OF PIT, IF NOT CLEAR ON SITE MAPS

East Southeast

YES NO

☐ ☒ Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

☐ ☒ Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right of way, and in no case may the excavation be closer to the right of way than fifty feet or twenty-five feet plus one and one-half (1-½) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☐ ☒ Will any excavation start at or within fifty feet (50') of any property line?
(NOTE: If the answer is "yes", a safety barrier may be needed.)

Monroe

RECLAMATION PLAN - 10 CSR 40-10.020(2)(D)2.

A. REVEGETATION (Attach additional sheets, if needed)

| | | |
|---------------------|----------------------|-----------------------------|
| REVEGETATION MIX #1 | PURPOSE OR LAND USE | B. SEEDING OR PLANTING TIME |
| | Wildlife & lake area | Spring/March-April |

DESCRIBE METHODS AND EQUIPMENT TO BE USED FOR SEEDING OR PLANTING

Broadcast seeding followed by harrowing

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients. Mulch will be applied to all slopes exceeding 5:1.

| SEEDED SPECIES | POUNDS/ACRE | TREE OR SHRUB SPECIES | STEMS/ACRE |
|----------------|-------------|-----------------------|------------|
| Wheat | 50# | | |
| Orchard Grass | 6# | | |
| Timothy | 10# | | |
| Red Clover | 10# | | |
| Crown Vetch | 5# | | |

| | | |
|---------------------|---------------------|-----------------------------|
| REVEGETATION MIX #2 | PURPOSE OR LAND USE | B. SEEDING OR PLANTING TIME |
|---------------------|---------------------|-----------------------------|

DESCRIBE METHODS AND EQUIPMENT TO BE USED FOR SEEDING OR PLANTING

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients. Mulch will be applied to all slopes exceeding 5:1.

| SEEDED SPECIES | POUNDS/ACRE | TREE OR SHRUB SPECIES | STEMS/ACRE |
|----------------|-------------|-----------------------|------------|
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ATTACH ADDITIONAL SHEETS FOR ADDITIONAL SEED MIXES.

B. GRADING

DESCRIBE PROPOSED RECLAIMED TOPOGRAPHY, INCLUDING SLOPES

Lake area with all other slopes graded 3:1

C. DESCRIBE THE GENERAL SEQUENCE AND TIMING OF THE FOLLOWING ACTIVITIES

GRADING

Grading will be done within 12 months after expiration of the permit

REPLACEMENT OF TOPSOIL

Immediately following and along with grading

REVEGETATION

Within 24 months - at earliest planting season following ground preparation

AVERAGE DEPTH OF REPLACED TOPSOIL (INCHES)

12

D. USE OF LAND WHEN RECLAIMED

Estimate acreage of each land use below, after reclamation

ESTIMATED ACRES:

Wildlife (forest or other habitat with livestock excluded)

1 + 1

Agricultural (pasture, cropland, and horticultural)

Development (residential, industrial, and recreational)

Water impoundments (for wildlife, agricultural, or development)

3

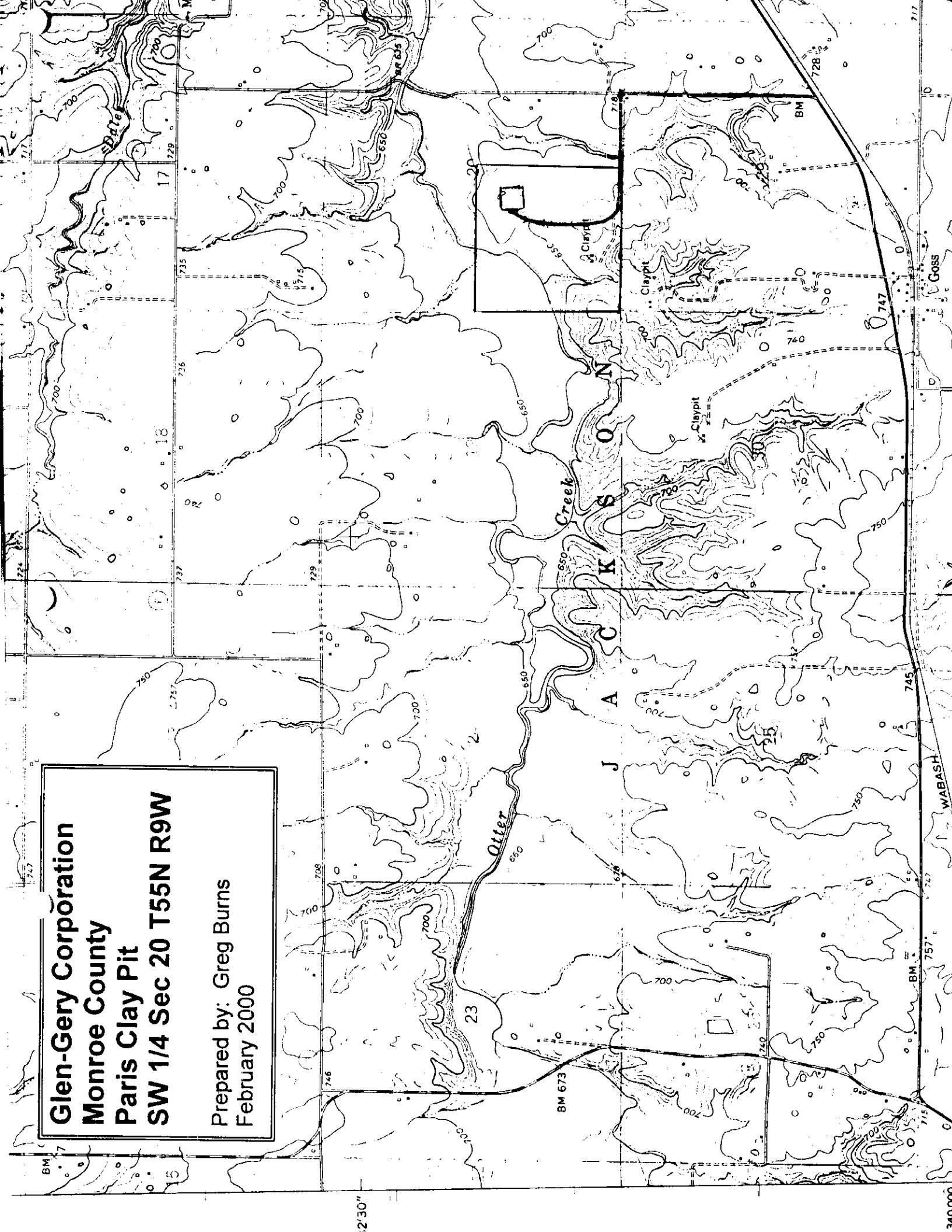
By my signature, I attest to the following:

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Sections 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained the approval of all landowner's for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

| | | | |
|--|---|--|--|
| SIGNATURE OF APPLICANT <i>Paul E McIntosh</i> | | TITLE Plant Manager | DATE 2-24-92 |
| NOTARY PUBLIC EMBOSSEER SEAL | STATE <i>Missouri</i> | COUNTY (OR CITY OF ST. LOUIS) <i>LIVINGSTON</i> | |
| | SUBSCRIBED AND SWORN BEFORE ME, THIS <i>3</i> DAY OF <i>March</i> 19 <i>92</i> | | USE RUBBER STAMP IN CLEAR AREA BELOW RICHARD J. SAALE Notary Public - State of Missouri Commissioned in Livingston County My Commission Expires March 23, 1992 |
| | NOTARY PUBLIC SIGNATURE <i>Richard J. Saale</i> | MY COMMISSION EXPIRES <i>3/23/92</i> | |
| | NOTARY PUBLIC NAME (TYPED OR PRINTED) <i>RICHARD J SAALE</i> | | |
| APPROVED BY (DIRECTOR'S REPRESENTATIVE) <i>Karen F. Northrup</i> <i>RSI</i> | | DATE APPROVED <i>4/6/92</i> | PERMIT NUMBER <i>545</i> |

**Glen-Gery Corporation
Monroe County
Paris Clay Pit
SW 1/4 Sec 20 T55N R9W**

Prepared by: Greg Burns
February 2000

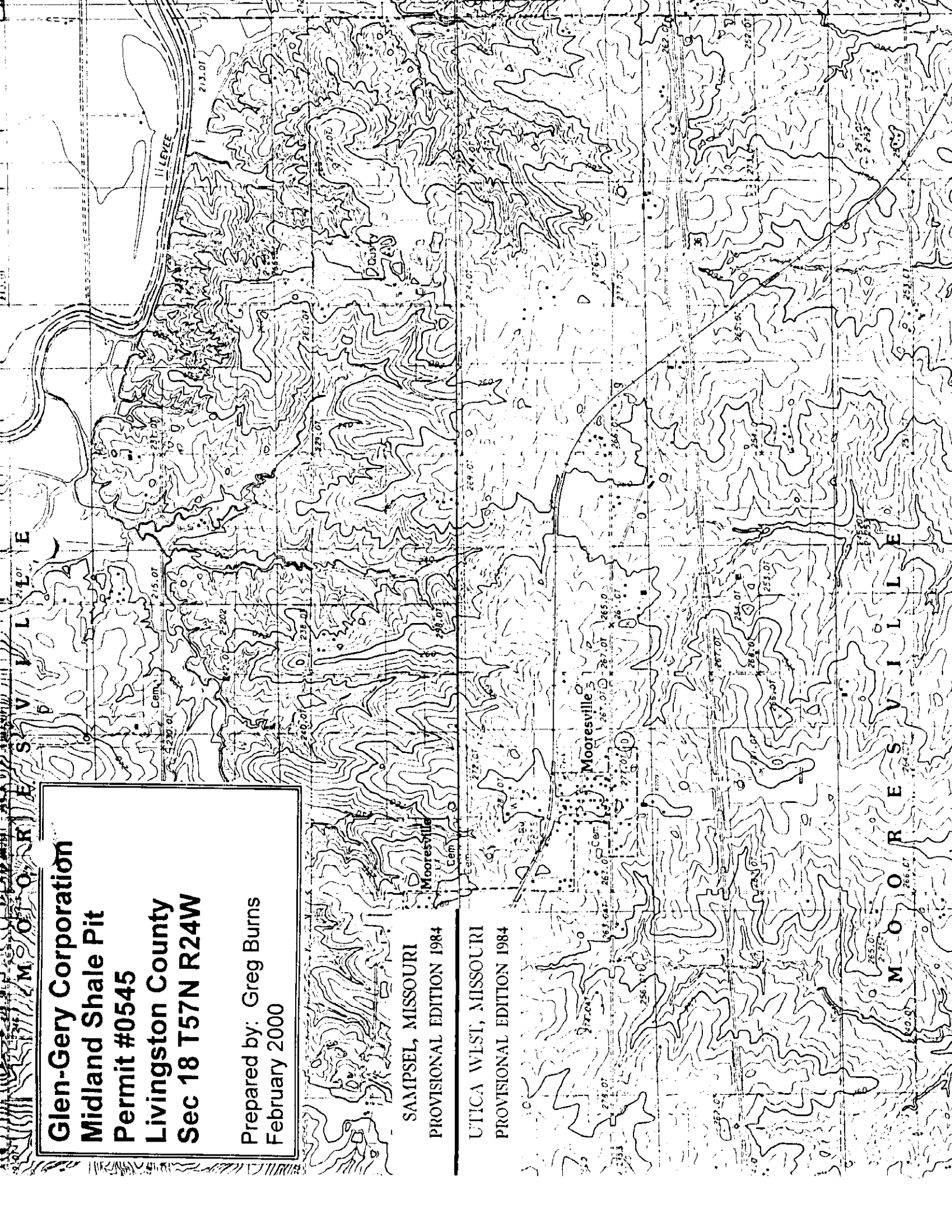


Glen-Gery Corporation
Midland Shale Pit
Permit #0545
Livingston County
Sec 18 T57N R24W

Prepared by: Greg Burns
February 2000

SAMPLE, MISSOURI
PROVISIONAL EDITION 1984

UTICA WEST, MISSOURI
PROVISIONAL EDITION 1984

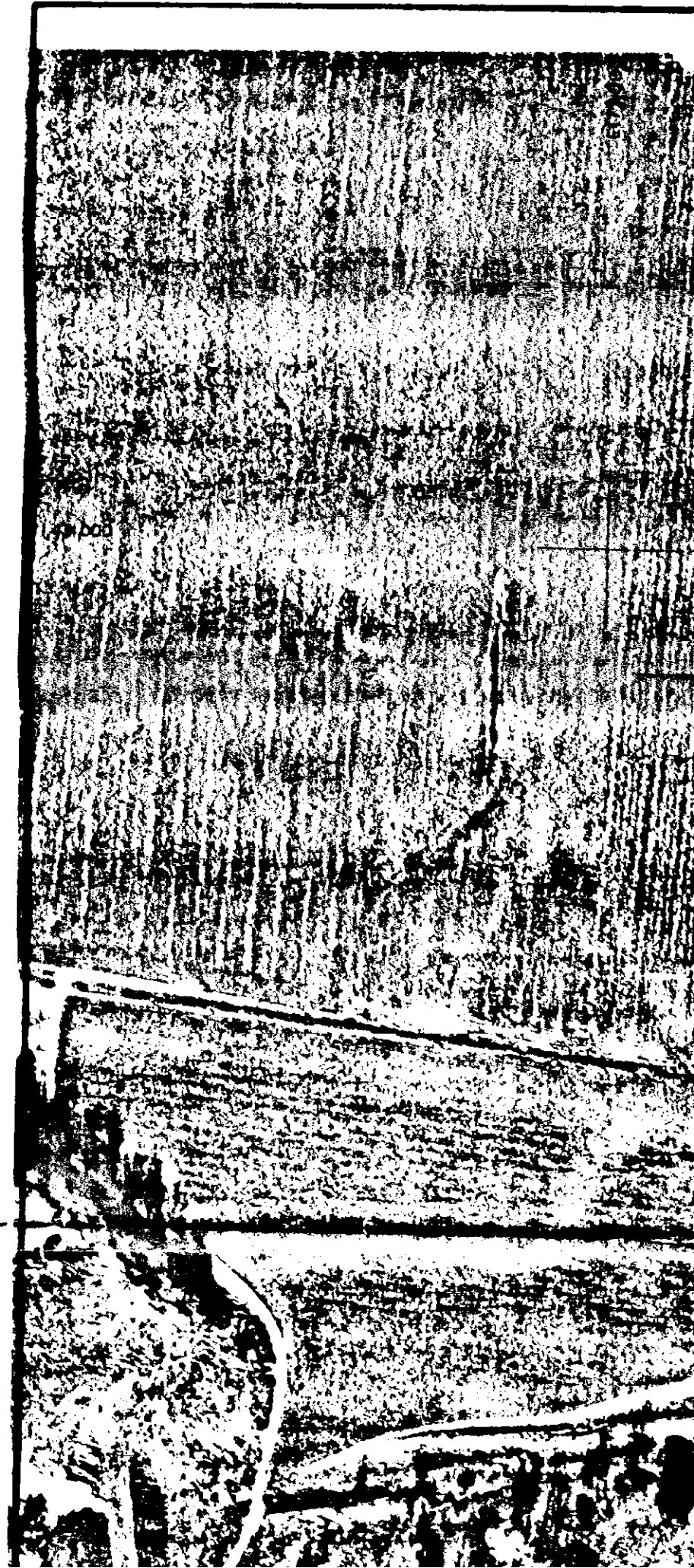


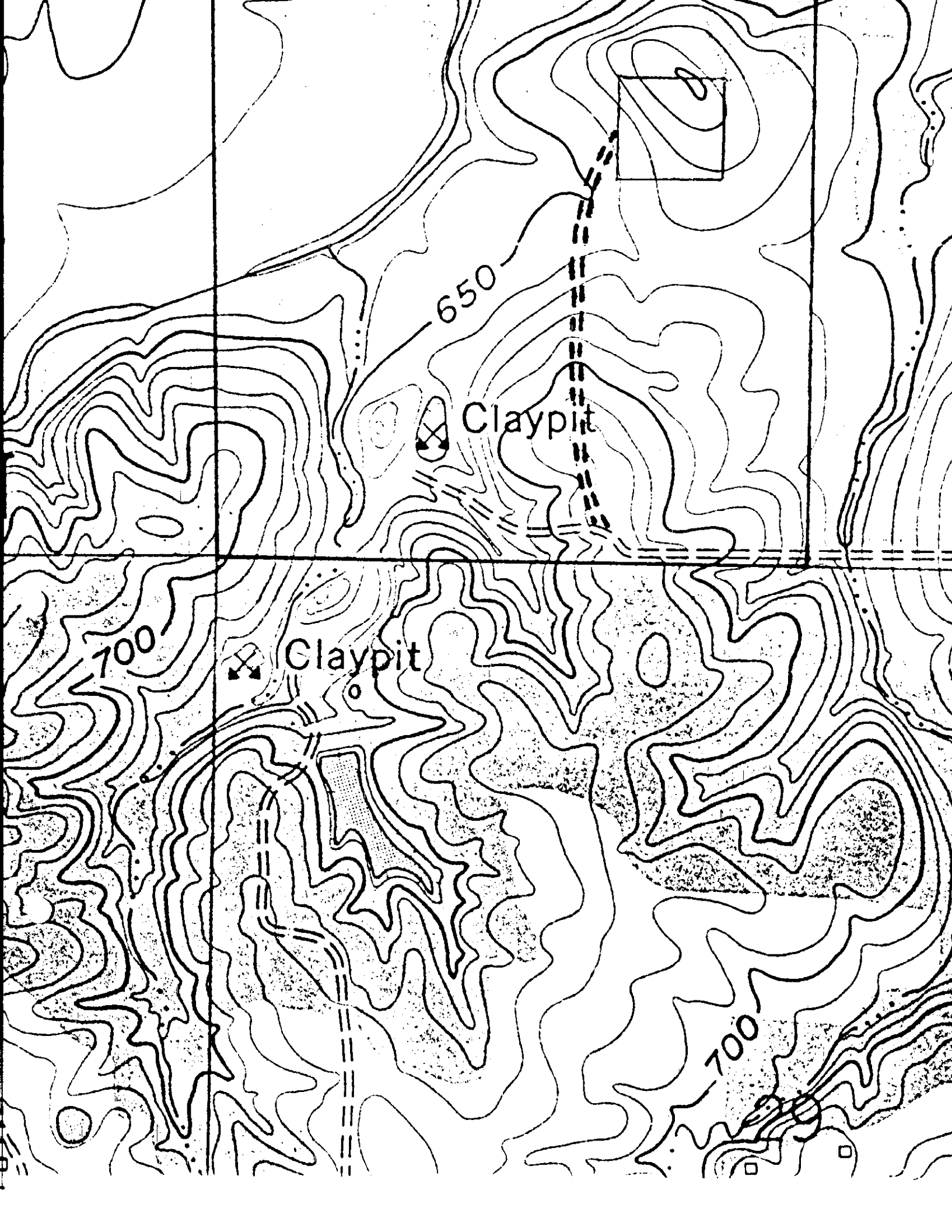
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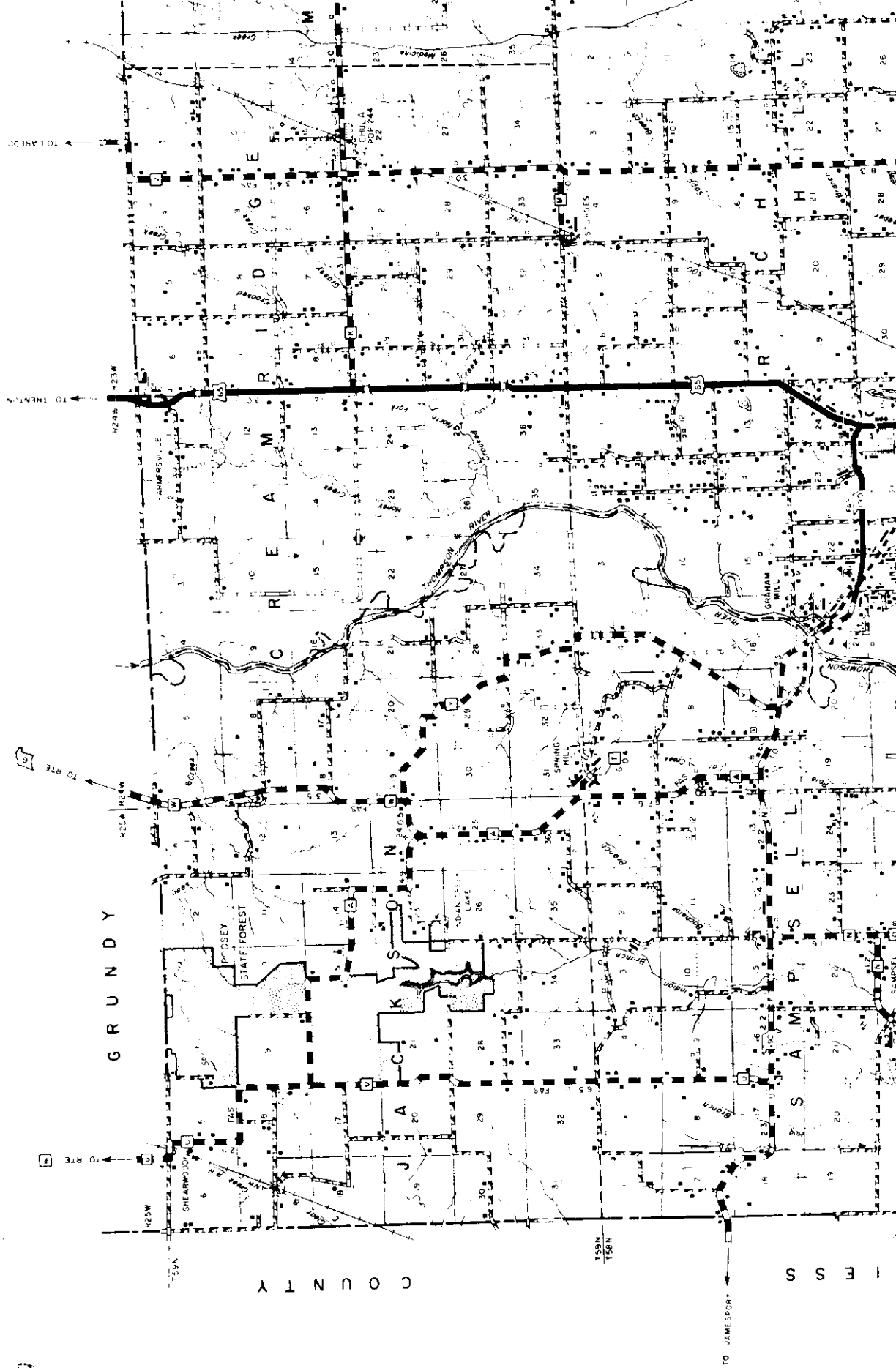
S-18 T-57 N R-24W





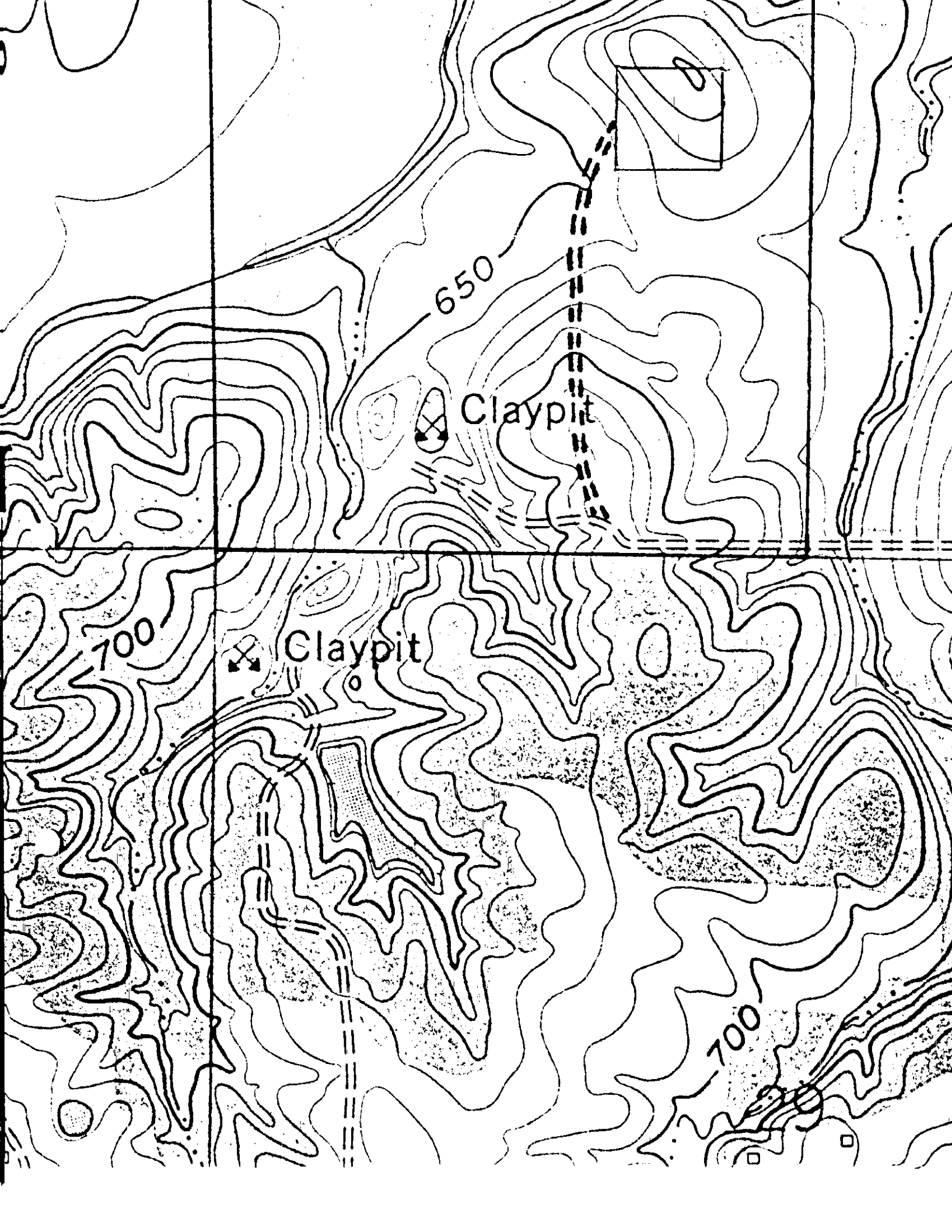
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RECEIVED



S-18 T-57 N R-24W



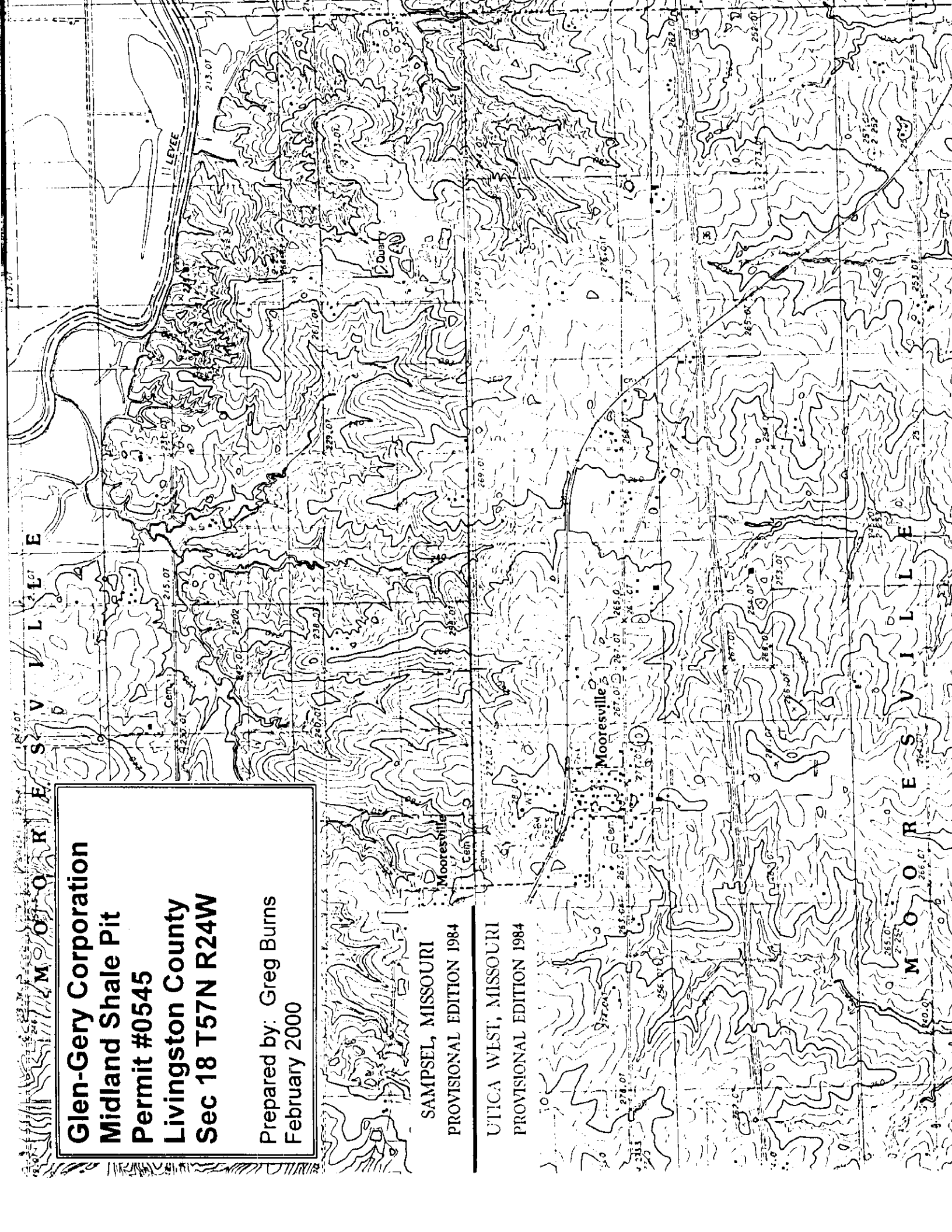


**Glen-Gery Corporation
Midland Shale Pit
Permit #0545
Livingston County
Sec 18 T57N R24W**

**Prepared by: Greg Burns
February 2000**

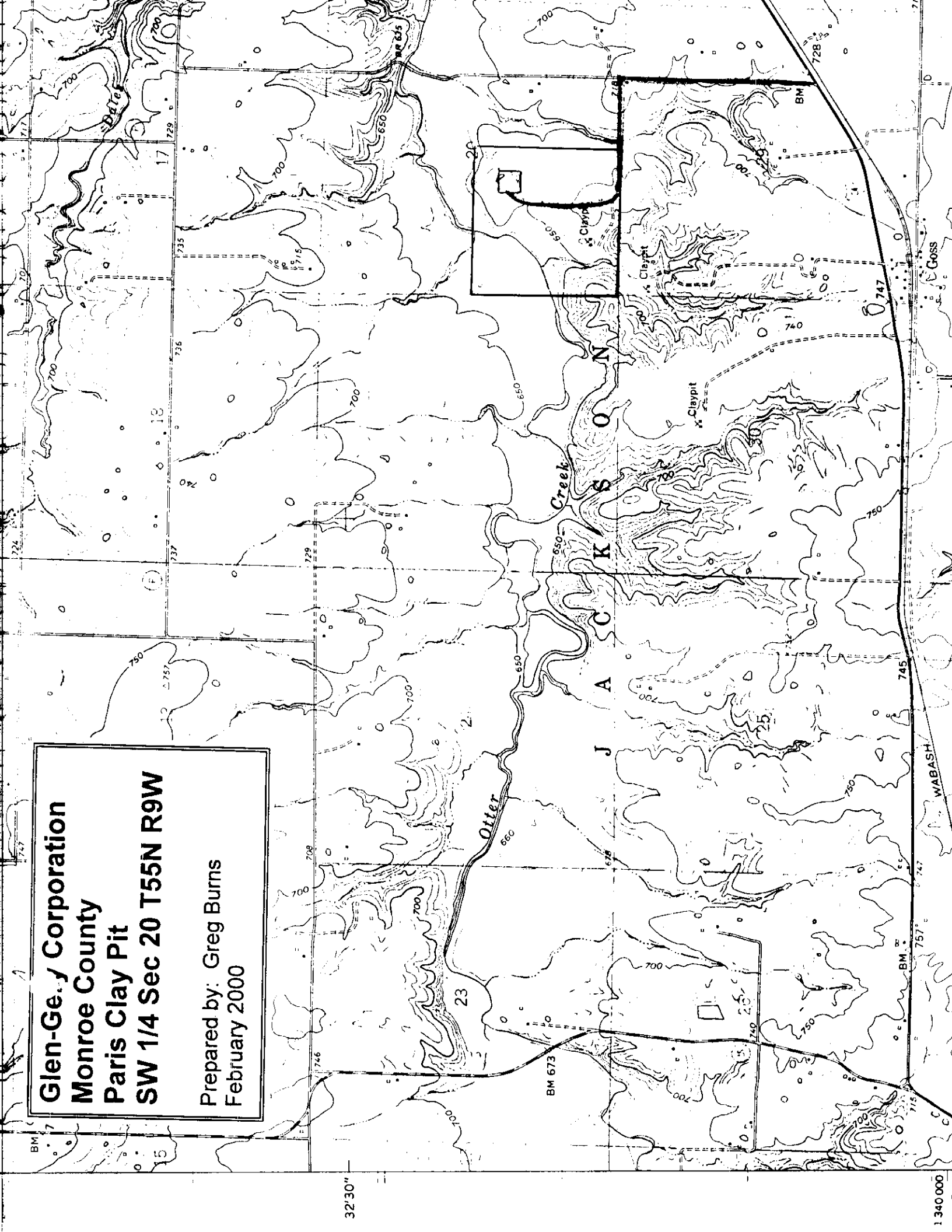
Prepared by: Greg Burns
February 2000

**SAMPSEL, MISSOURI
PROVISIONAL EDITION 1984**

UTICA WEST, MISSOURI
PROVISIONAL EDITION 1984

**Glen-Ge. Corporation
Monroe County
Paris Clay Pit
SW 1/4 Sec 20 T55N R9W**

Prepared by: Greg Burns
February 2000



32'30"

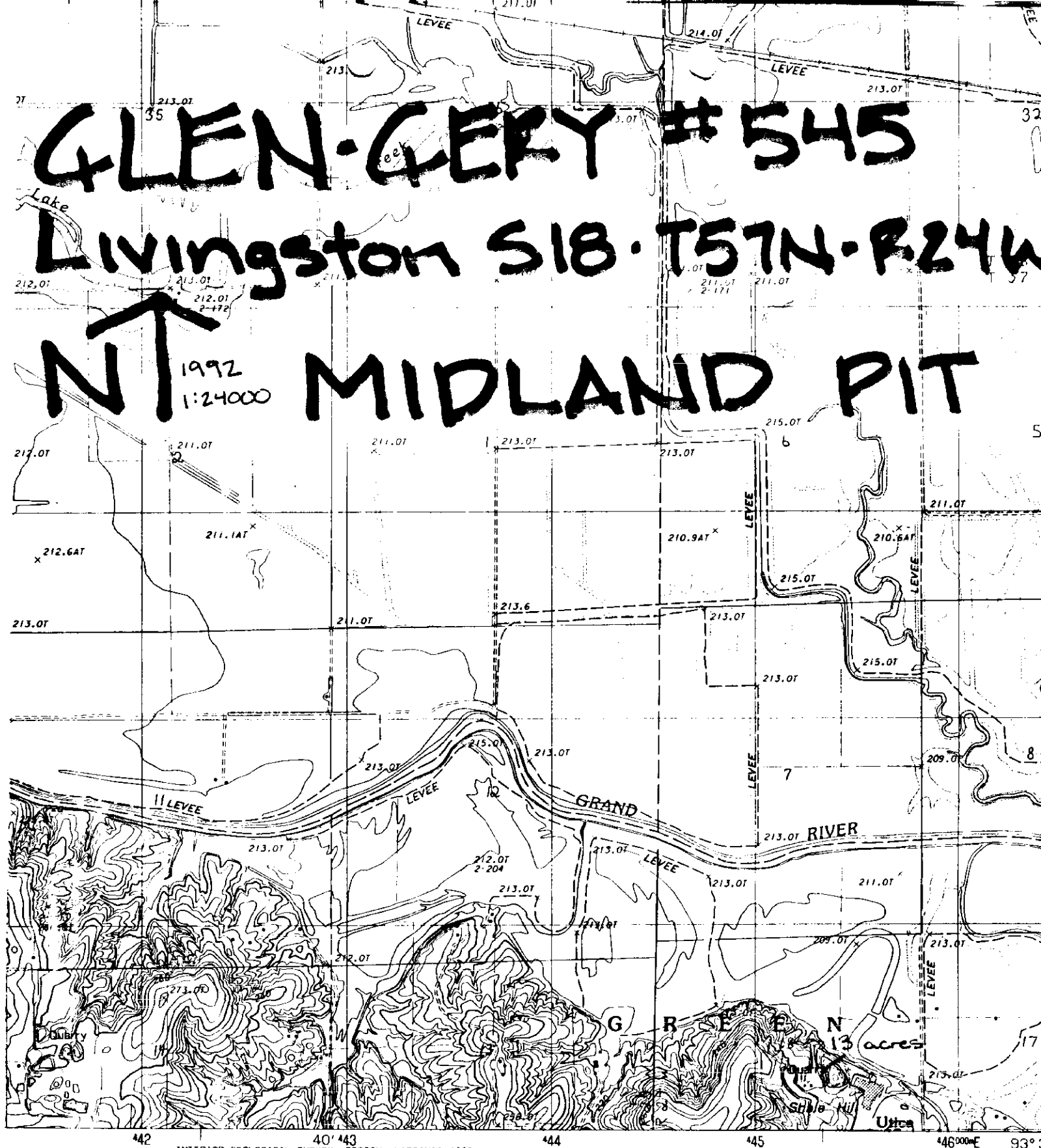
1 340 000

GLEN-GEY #545

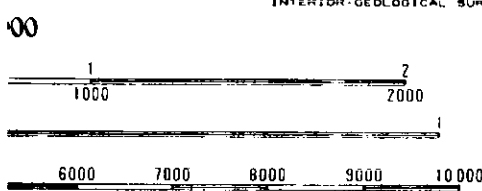
LIVINGSTON S18-T57N-R24W

1992
1:24000

MIDLAND PIT



INTERIOR GEOLOGICAL SURVEY, RESTON, VIRGINIA-1985



QUADRANGLE LOCATION

CONTOURS AND ELEVATIONS IN METERS
ROAD LEGEND

Improved Road
Unimproved Road
Trail

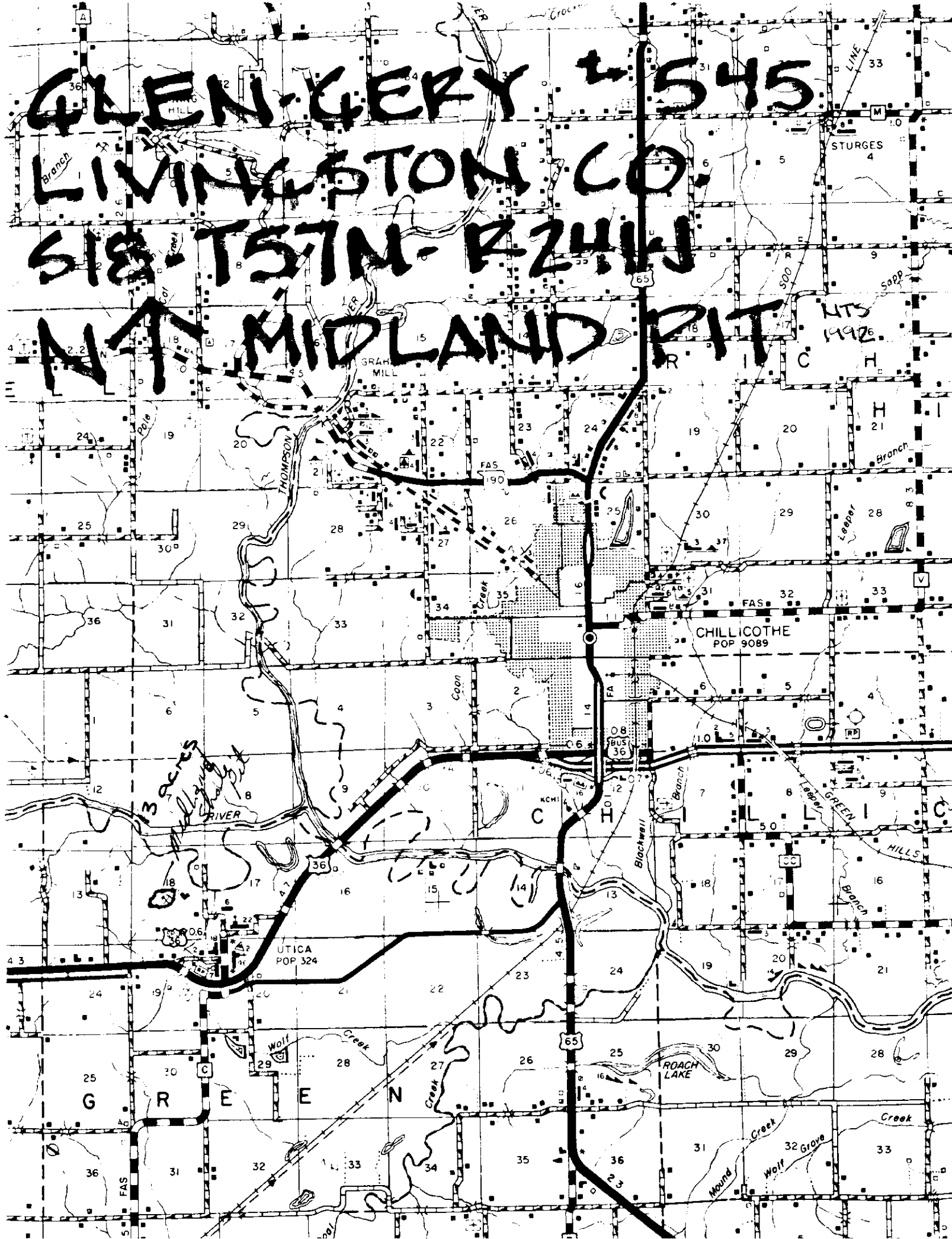
Interstate Route U.S. Route State Route

· METERS
INTERVAL 2 METERS
DOWN TO THE NEAREST 0.1 METER
NEAREST METER
by 1:24000

| | | | |
|---|---|---|----------------|
| 1 | 2 | 3 | 1 Jamesport |
| | | | 2 Shearwood |
| | | | 3 Farmersville |
| 4 | | 5 | 4 Breckenridge |
| | | | 5 Chillicothe |

SAMPSEL, MISSOURI
PROVISIONAL EDITION 199

GLEN-KERY 4545
LIVINGSTON CO.
S18-T57N-R24W
NAT MIDLAND PIT



NTS
1992
N
→



MONROE
S20-T55-A R9W
PARIS PIT

MN
NTS
1992

KENDRICK
PROPERTY

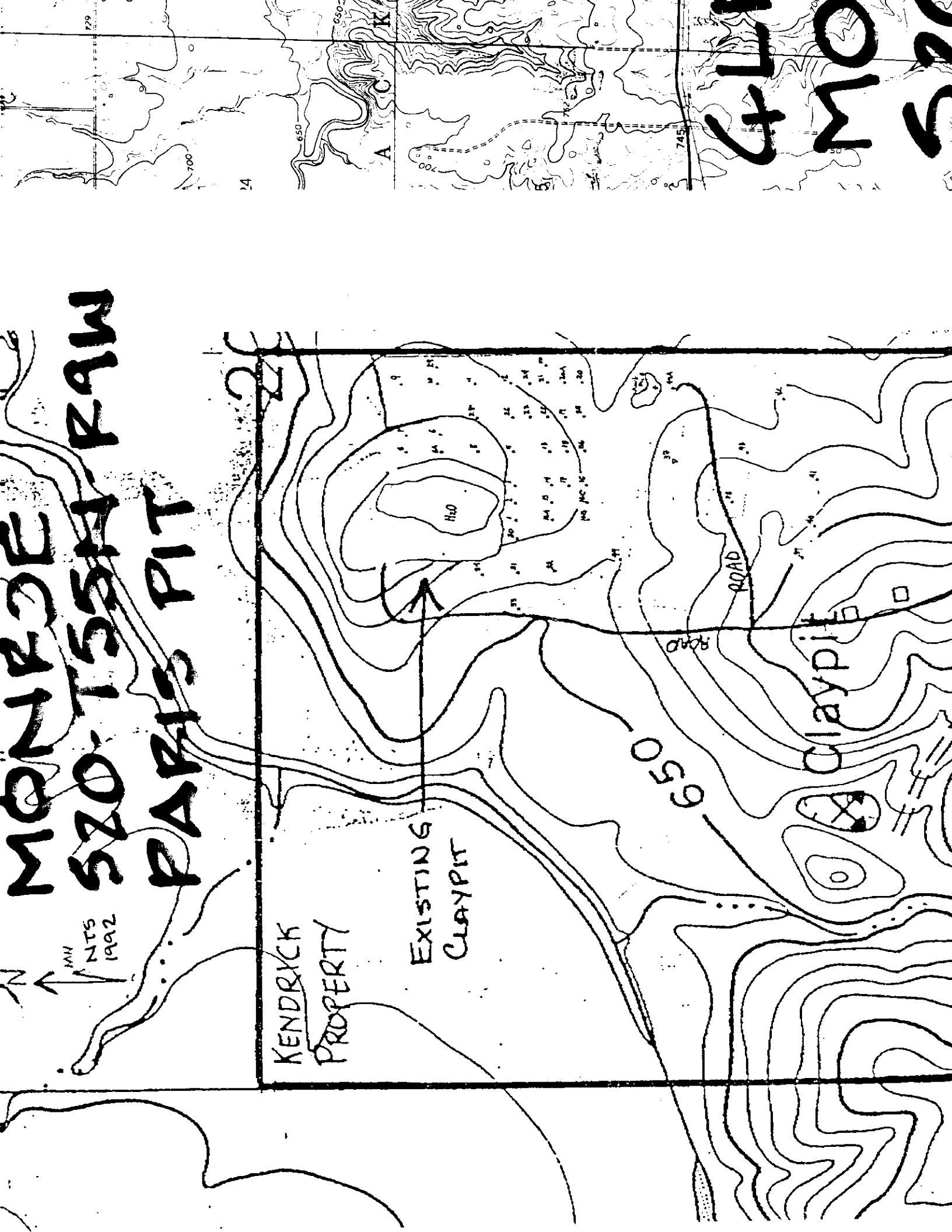
EXISTING
CLAYPIT

650

CLAYPIT

ROAD

ROAD

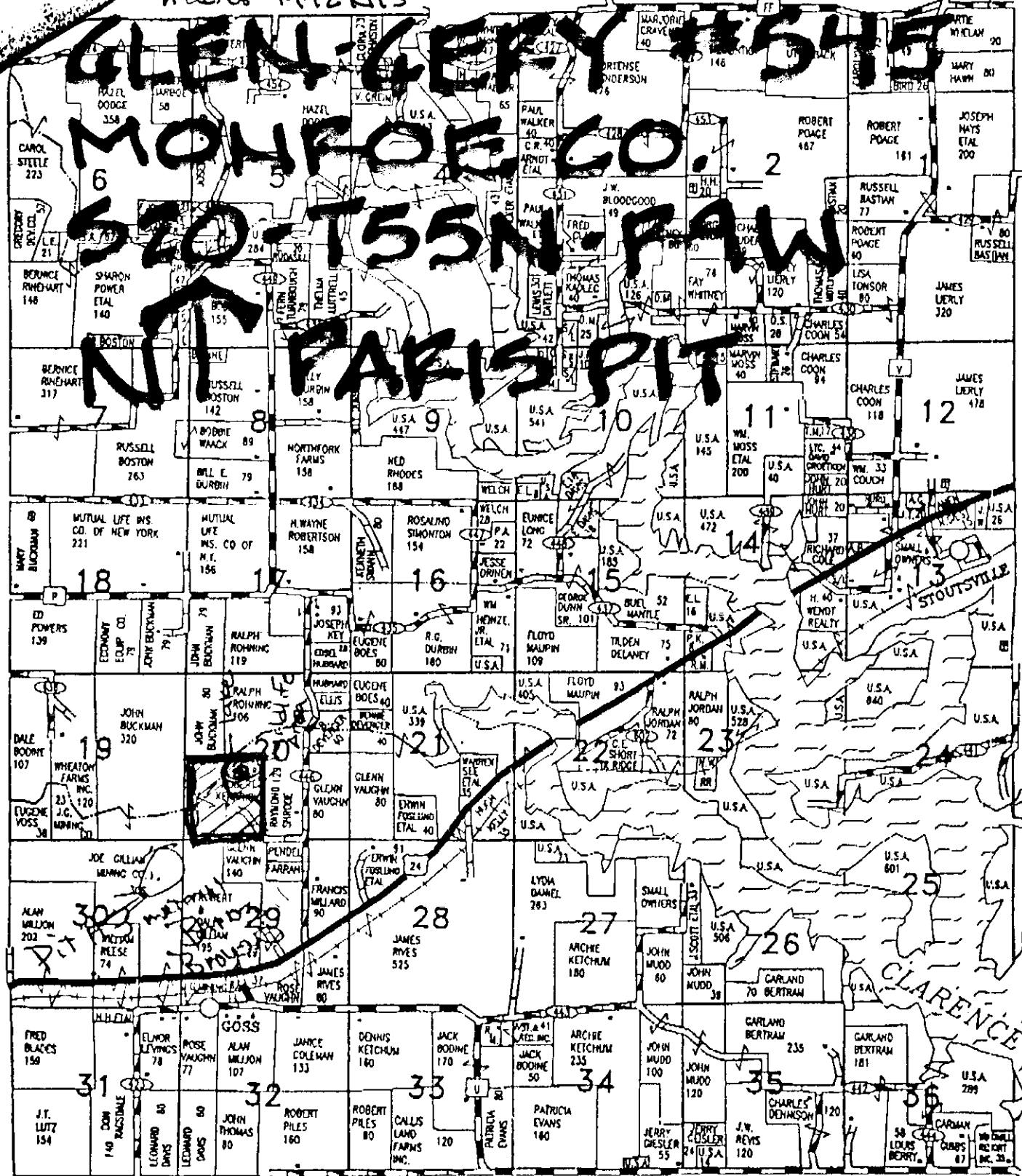


11 acres 1992 NTS

GLEN GERY #545
MONROE CO.
S20-T55N-R9W
N11 PARIS PIT

SEE PAGE 18

SEE PAGE 20



SEE PAGE 27